REMARKS

Claims 9-16 are pending. Claims 9-14 have been allowed. Claim 15 was rejected as being obvious over Strobl (US Patent 5,360,274) in view of Adachi et al. (JP 403103614). Claim 16 was rejected as being obvious over Strobl in view of Eustache (US Patent 5360274) and Adachi. Both rejections are based on the assertion that Strobl teaches the claimed bearing. This assertion is not correct.

Claim 15 recites a shaft having a spherical journal surface supported inside and rotatable against a cylindrical bearing surface. Claim 16 recites a spherical journal and a cylindrical bearing supporting the journal. Strobl teaches a spherical journal surface (outer surface 3 on bearing member 1) supported inside and rotatable against a "frusto-conical convergent end 7" and fingers 10 of a retainer 9:

> "The bearing member 1 is mounted in a housing 6 which has a frusto-conical convergent end 7 engaging the outer surface 3 of the bearing member 1. A retainer 9 ... has resilient fingers 10 which bear against the opposite sides of the outer surface 3 of the bearing member 1 so as to urge the bearing member 1 axially into engagement with the frusto-conical convergent end 7 of housing 6." Strobl column 5, lines 51-58.

Strobl does not teach that convergent end 7 or fingers 10 are cylindrical. It appears from Fig. 1 that convergent end 7 and fingers 10 are not cylindrical.

The Examiner apparently asserts that support ring 11 is a cylindrical bearing surface as recited in Claim 15 (paragraph 1 of the Office Action) and a cylindrical bearing as recited in Claim 16 (paragraph 1 of the Office Action). Any such assertion is not correct. As explicitly defined in the Specification, in a journal bearing, the stationary supporting part is called the "bearing" and that portion of a moving part ***directly supported*** by the bearing is called the "journal." The surfaces of each of these parts that move against one another are called the "bearing surface" and the "journal surface", respectively. Specification paragraph 0011. In Strobl, support ring 11 does not directly support spherical surface 3. Indeed, support ring

11 in Strobl does not support surface 3 at all. On the contrary, Strobl specifically teaches "a small ***annular*** clearance space 13" between spherical outer surface 3 and inner portion 12 of support ring 11. Strobl column 6, lines 11-14 (emphasis added). Hence, support ring 11 is neither a bearing nor a bearing surface as those terms are defined in the Specification and used in the claims. Further with regard to the specific language of Claim 15, surface 3 is not supported inside and rotatable against inner portion 12 of support ring 11.

Applicants acknowledge that, although not expressly stated in Strobl, spherical surface 3 apparently may come into contact with inner portion 12 of support ring 11 under "shock loading" (when the bearing is dropped from a height of one meter, for example) to prevent "permanently distorting" or "overstraining" retainer 9. Strobl column 6, lines 1-18. This shock load restraining function, however, cannot reasonably be deemed to constitute the direct support of surface 3 provided by a bearing or bearing surface. Direct support of surface 3 in Strobl is provided by frusto-conical convergent end 7 and fingers 10. A contrary reading of Strobl is wholly inconsistent with the explicit teaching that "a small annular clearance space 13" is present between surface 3 and support ring 11. Moreover, there is not the least suggestion in Strobl that spherical surface 3 ever rotates against inner portion 12 of support ring 11. While one might speculate that if a motor containing the bearing shown in Fig. 1 of Strobl is dropped from a height of one meter while it is running, then it is possible that surface 3 might, for an instant, rotate against inner portion 12 of support ring 11. Of course, any such instantaneous rotation does not meet the limitations of the claims and, in any event, any such speculation is wholly irrelevant to the question of the patentability of Claims 15 and 16.

If the Examiner continues to assert that inner portion 12 of support ring 11 is a cylindrical bearing surface as recited in Claim 15 or the support ring 11 is a cylindrical bearing as recited in Claim 16, then she is respectfully requested to

specifically point out and explain those passages in Strobl that can reasonably be deemed to teach or even suggest that portion 12 and/or ring 11 directly supports surface 3 and that surface 3 is rotatable against portion 12. Absent such a showing, the rejection of Claims 15 and 16 should be withdrawn.

Respectfully submitted,

By 

Steven R. Ormiston
Registration No. 35,974
Telephone: 208.433.1991 x204